78 Years Ago,
America’s 1st Jet Fighter
The XP-59 “Airacomet”
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An Update On Progress

In a previous issue of Flight Lines, the museum reported on efforts to establish an Aviation Workforce Initiative (AWI) program that included components such as the establishment of Flight Clubs in the school system, an Education and Outreach Program, and the establishment of an Aviation Technology Center at the museum. Although pandemic restrictions caused much of the program to be delayed, the “behind-the-scene” planning progress continued.

The basis for this AWI focuses on the debate about the quality of U.S. education and the need for more and better technical instruction to enable young people to cope with rapidly changing technology. The world of aviation is one in which technical skills and proficiency are of paramount importance. Moreover, aviation, more than many other disciplines, has an ability to inspire youth and create an excitement in a classroom setting that can spill over into other academic areas.

One of the ways Councilor John Hilliard, with the support of the Birmingham City Council, the Board of Education, and the Mayor’s office, hope to spark a new generation of aviators in Alabama is by helping to introduce aviation programming to local middle schools and high schools.

“That will be a major access point for our students to start building interest in flying, whether that be drones, planes, helicopters or even the engineering that goes into those. We’re working with the Southern Museum of Flight to see if we can get the junior colleges to open up their classrooms to this type of curriculum as well.” Hilliard is also working with the Birmingham City School system to establish a state-funded aviation program. “Once we can show the need for that program we can start to implement that here,” he said. “The child in me that learned about the Tuskegee Airmen said this is my shot to inspire a new generation of inner-city kids to learn to fly.”

As the aviation industry continues to expand, having a workforce that is capable of filling these positions is vital. “Let’s give these children a chance to explore the stars. It’s time for a new generation of aviators in Alabama. And that’s exactly what we’re trying to build,” said Hilliard.

Efforts to establish Flight Clubs in the Birmingham school system are well underway and parts of the Education and Outreach Program have been conducted.

The Flight Club Outreach Program is organized at the Pre-K-12th grades and will follow the FAA Aerospace Curriculum Model that will be adapted to specific grade levels. Currently, flight clubs are created in many of the Birmingham schools, including South Hampton and Wilkerson Middle Schools.

In the Washington Middle School, the club expands students’ critical thinking and allows them to do STEM (Science, Technology, Engineering and Mathematics) activities. Students are learning what’s required to fly a plane and much more. The club has not only generated their interest in aviation, but it’s also broadened their horizons in looking at career choices in engineering, technology and science.

When you allow students to engage with professionals and with people who are doing what they want to do, students can see that as a career and that’s what the Flight Clubs and the total AWI program are designed to accomplish.
On October 1, 1942, the first flight of the Bell XP-59 “Airacomet”, American’s effort to produce their own jet-powered fighter early in World War II, were shrouded in secrecy and there were actually two aircraft that bore the “XP-59” name. The first was a twin boom, pusher-propeller fighter developed by Bell Aircraft which was given the designation XP-59. This aircraft was under development at the time that the United States received jet engine technology from the British and, while the XP-59 was never slated for production, it provided a useful cover for the development of America’s first jet fighter.

The project was given the designation P-59A to give observers the idea that the aircraft was merely a development of the canceled XP-59, and the ruse was further perpetuated when, during ground movements of the first aircraft at Muroc (Edwards Air Force Base today), a wooden propeller was affixed to the nose and shrouds were placed over the engine nacelles to hide the true nature of the aircraft’s power plant.

The Airacomet had its two engines and intake nacelles integrated into the fuselage, a design that would heavily influence future jet aircraft design. The Airacomet’s first flight was actually unintended, as the Bell test pilot unintentionally lifted off the ground during high-speed taxi tests. The official maiden flight was made on October 2, 1942.

The Airacomet generally performed well, though it showed a tendency to yaw from side to side and was deemed unsuitable as a fighter. With a top speed of 404 mph, it was no great leap forward from propeller fighters and, even when the P-59B was given an upgraded engine, it’s top speed only just equaled that of the North American P-51 Mustang.

A total of 66 Airacomets were produced and, while the aircraft saw limited service, it proved useful for training the first generation of jet fighter pilots and mechanics, who used the P-59 to learn the characteristics of jet aviation and maintenance before transitioning to more modern aircraft.

A further development of the Airacomet, with a single engine, was considered, but that project was eventually handed off to Lockheed, where Kelly Johnson developed it into the P-80 “Shooting Star”, the first jet fighter to be flown operationally by the US.

The P-80 was designed and built by Lockheed in 1943 and delivered just 143 days from the start of the design process. Production models were flying, and two pre-production models did see very limited service in Italy just before the end of World War II. Designed with straight wings, the type saw combat in Korea with the USAF as the F-80 “Shooting Star.”

As America’s first successful turbo-jet combat aircraft, it helped usher in the “jet age” in the USAF, but was out-classed when the swept-wing transonic MiG-15 appeared in Korea. The F-80 was quickly replaced in the air superiority role by the transonic F-86 “Sabrejet”. The F-94 “Starfire”, an all-weather interceptor on the same airframe, also saw Korean War service.

The closely related T-33 “Shooting Star” trainer would remain in service with the USAF and Navy well into the 1980s, with the last variant not retired until April 1997. Many T-33s still serve in a military role in foreign air arms or are in private hands, although the F-80 itself has long been retired from active service.
In June 1936, Frank Wilson Hulse, III (1913–1992) and Ike Jones bought a controlling interest in Southern Airways of Georgia, a fixed-base operator and flight school. In 1941, Southern Airways of Georgia applied for CAA Board certification to become a local service air carrier in the southeast states but World War II interrupted this plan. Then, in June 1949, Southern Airways became certified and began service between Memphis and Atlanta, with stops in Gadsden, Birmingham and Tuscaloosa, AL and Columbus, MS. Southern Airways corporate headquarters was in Birmingham, with operations headquartered at Hartsfield–Jackson Atlanta International Airport. Like most local service airlines, Southern flew only Douglas DC-3s for the first few years.

Southern Airways called itself the "Route of the Aristocrats" and they used the slogan "Nobody's Second Class on Southern" in their TV commercials. Their last scheduled DC-3 flight was in 1967.

The last year of independent operation for Southern was 1979, when it merged with North Central Airlines to become Republic Airlines. In 1986, Republic was acquired by Northwest Airlines, and in 2008, Northwest was merged with Delta Airlines.

One of the museum’s aircraft proudly on display at the Memorial Airpark is a Douglas R4D-6Q (shown above). Success of the DC-3 in the commercial market spurred interest in the aircraft from the US military. Of the 10,000 DC-3s ordered by the Army Air Force (designated mostly as C-47s), the Navy received 568, designating them R4D “Skytrains.”

As a tribute and honor to Southern Airways and Frank Hulse, the museum’s Skytrain has been repainted in original Southern Airway’s colors which helps preserve the memory of this airline and its important connection to Birmingham.

Southern Airways was also part of an epic event during the fall of 1972.

Flight 49, en route from Memphis to Miami, was hijacked during a stopover in Birmingham. Three hijackers boarded the plane armed with handguns and fake hand grenades. The hijackers took the airplane, 27 passengers, and the plane’s crew of 4, eventually landing in Havana, Cuba, where Cuban authorities then arrested the hijackers and, after a delay, sent the plane, crew, passengers, and eventually the ransom money back to the United States.

Frank Wilson Hulse is a member of the Alabama Aviation Hall of Fame (1982 Induction) and the Georgia Aviation Hall of Fame (1991 Induction).

A Life History of Our “Skytrain”

- Constructed as a C-47B-15-DK - Oklahoma City, OK 1944
- To the USAAF (s/n 43-49457), then to USN (BuNo50814) Nov 26, 1944
- As a R4D-6, to NAS, Seattle, WA Nov 26, 1944
- To Fleet Airborne Electronic Training Unit - Pacific Sept 1945
- To NAS San Diego, CA Feb 1948
- To Fleet Airborne Electronic Training Unit - Pacific Aug 1948
- Designated as C-47J Sept 18, 1962
- To the US Army and converted to an EC-47J 1969
- To the US Army Electronics Command, Lakehurst, NJ Apr 1969
- To Ft. Bragg, NC - converted to a C-47J at the JFK Center for Military Assistance * May 1970
- To North Carolina Forest Service, Raleigh, NC Sept 30, 1975
- Airworthiness Certificate for N48211 (R4D-6Q - 50814) Mar 22, 1999
- To Southern Museum of Flight, Birmingham, AL (R4D-6Q) Mar 22, 1999

* Flew approximately 500 hours annually in support of Special Forces missions, such as HALO parachute drops, VIP missions, transportation for the JFK Commanding General, troop transport for missions to Billings, MT for cold weather survival training, missions to U.S. Army Special Forces Underwater Operations School and Combat Diver Qualification Course in Key West, FL, and night special operation infiltration missions.